

DECLARATION (37 CFR 1.63) AND POWER OF ATTORNEY

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name, and

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled NOVEL G PROTEIN-COUPLED RECEPTOR, the specification of which

- ☐ is attached hereto.
- ☐ was filed on as Application No. and was amended on .
- ☒ was filed on 16 December 1998 as PCT International Application No. SE98/02348 and was amended under PCT Article 19 on , if applicable.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with 37 CFR 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119, of any foreign application(s) for patent or inventor's certificate or of any PCT International Application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application for patent or inventor's certificate or any PCT International Application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application on which priority is claimed:

<u>Application Serial No.</u>	<u>Country</u>	<u>Filing Date (Day/Month/Year)</u>	<u>Priority Claimed (Yes/No)</u>
9704836-7	Sweden	22 December 1997	Yes

I hereby claim the benefit under Title 35, United States Code, Section 120, of any United States application(s) or PCT International Application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application(s) in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56, which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

<u>Application Serial No.</u>	<u>Filing Date</u>	<u>Status (Patented, Pending, Abandoned)</u>
-----------------------------------	--------------------	--

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I hereby appoint Robert A. Armitage (Registration No. 27,417), Rodney M. Anderson (Registration No. 31,939), Steven R. Borgman (Registration No. 33,160), Valerie S. Boutwell (Registration No. 36,754), W. Scott Brown (Registration No. 32,968), Leslie J. Clark (Registration No. 34,800), Laura A. Crowe (Registration No. 35,850), G. Harvey Dunn, III (Registration No. 31,102), Barry E. Engel (Registration No. P-37,127), A.H. Evans (Registration No. 22,032), Kevin M. Hart (Registration No. 36,823), William L. LaFuze (Registration No. 27,205), Stephen L. Levine (Registration No. 33,413), Alan W. Lintel (Registration No. 32,478), J. Clark Martin (Registration No. 26,198), Peter E. Mims (Registration No. 32,429), W. Ronald Robins (Registration No. 26,222), Michael A. Sanzo (Registration No. 36,912), Jerry R. Selinger (Registration No. 26,582), Jack R. Springgate (Registration No. 17,385), Alan R. Thiele (Registration No. 30,694), Darrell E. Warner (Registration No. 36,046), and Karen Tucker White (Registration No. 34,267), all registered to practice before the Patent and Trademark Office as my attorneys with full power of substitution and revocation to prosecute this application and all divisions and continuations thereof and to transact all business in the Patent and Trademark Office connected therewith and request that all correspondence and telephone communications be directed to the following person(s) at the mailing address and telephone number hereafter given:

Name	:	Robert A. Armitage
Registration No.	:	27,417
Address	:	Vinson & Elkins L.L.P.; Suite 800 1455 Pennsylvania Avenue, N.W. Washington, D.C. 20004-1008
Telephone No.	:	(202) 639-6692

Inventor's Signature 

Date Jan 09/99

Full name of sole or first inventor: Sultan Ahmad

Residence Address: Quebec, Canada

Citizenship: Indian

Post Office Address: Astra Research Centre Montreal, 7171 Fredrick-Banting, St Laurent, Quebec H4S 1Z9, Canada

Inventor's Signature 

Date Jan 07/99

Full name of second joint inventor: Denis Banville

Residence Address: Quebec, Canada

Citizenship: Canadian

Post Office Address: 595 Lajeunesse, Ste-Dorothee, Quebec H7X 3K4, Canada

Inventor's Signature 

Date January 1999

Full name of third joint inventor: Yves Fortin

Residence Address: Quebec, Canada

Citizenship: Canadian

Post Office Address: 2985 Avenue Douglas, Montreal, Quebec H3R 2E2, Canada

Inventor's Signature 

Date Jan. 7, 1999

Full name of fourth joint inventor: Paola Lembo

Residence Address: Quebec, Canada

Citizenship: Canadian

Post Office Address: Astra Research Centre Montreal, 7171 Fredrick-Banting, St Laurent, Quebec H4S 1Z9, Canada

Inventor's Signature

Dajan O'Donnell

Date

Jan 6 1999

Full name of fifth joint inventor: Dajan O'Donnell

Residence Address: Quebec, Canada

Citizenship: Canadian

Post Office Address: Astra Research Centre Montreal, 7171 Fredrick-Banting, St Laurent,
Quebec H4S 1Z9, Canada

Inventor's Signature

Shi-Hsiang Shen

Date

Jan 7. 1999

Full name of sixth joint inventor: Shi-Hsiang Shen

Residence Address: Quebec, Canada

Citizenship: Canadian

Post Office Address: 161 Charwell, Crescent, Beaconsfield, Quebec H9W 1C2, Canada



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

SEPTEMBER 26, 2003

FITCH, EVEN, TABIN & FLANNERY
MICHAEL A. SANZO
1801 K STREET, N.W.
SUITE 401L
WASHINGTON, D.C. 20006-1201



700045459A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 09/24/2003

REEL/FRAME: 014000/0171
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).
OFFICE OF PUBLIC RECORDS

ASSIGNOR:

ASTRAZENECA CANADA INC.

DOC DATE: 09/24/2003

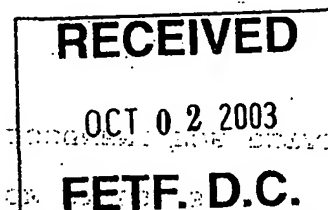
ASSIGNEE:

NATIONAL RESEARCH COUNCIL OF
CANADA
1200 MONTREAL ROAD
BLDG. M-58
OTTAWA, ONTARIO K1A 0R6, CANADA

SERIAL NUMBER: 09254227
PATENT NUMBER:

FILING DATE: 03/03/1999
ISSUE DATE:

SHAREILL COLES, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS



RECORDATION NUMBER: 09254227

RECORDATION NUMBER: 09254227

FITCH EVEN
09/24/2003
700045459

002

P)RM PTO-15M (Rev. 5-93)

RECORDATION FORM COVER SHEET

U.S. DEPARTMENT OF COMMERCE

OBM No. 0657-8031 (exp. 4/94)

PATENTS ONLY

Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

AstraZeneca Canada Inc.

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

2. Name and address of receiving party(ies):

Name: National Research Council of Canada

Internal Address: _____

Street Address: 1200 Montreal RoadBlgd. M-58City/State/ZIP: Ottawa, Ontario K1A 0R6CANADAAdditional name(s) & address(es)
attached? ☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ Other _____Execution Date: September 24, 2003

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: _____

A. Patent Application No.(s)

09/254,227

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Michael A. Sanzo

Internal Address: _____

Street Address: Fitch, Even, Tabin & Flannery
1801 K Street, N.W.
Suite 401LCity/State/ZIP: Washington, D.C. 20006-1201

6. Total number of applications and patents involved:

17. Total Fee (37 C.F.R. § 3.41) \$ 40.00☐ Enclosed☒ Authorized to be charged to deposit account

8. Deposit account number:

06-1135 Under Order No. 7567/73162

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Michael A. Sanzo
Name of Person Signing

Signature

Date

Total number of pages including cover sheet, attachments, and document:

3Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignments
Washington, D.C. 20231

FORM6-03.WP5

CH \$40.00 061135 09254227

Assignment to the National Research Council of Canada

Applicant(s): Ahmad, *et al.*
Appl. No.: 09/254,227
Filed: March 3, 1999
For: **G Protein-Coupled Receptors from the Rat and Human** (as amended)


AstraZeneca Canada Inc., a corporation of Canada, having a place of business at 1004 Middlegate Road, Mississauga, Ontario, L4Y 1M4, Canada (hereinafter "AstraZeneca Canada") is owner of right, title and interest in the inventions and discoveries (hereinafter "Inventions") described in the above-identified United States application (hereinafter "Application") by virtue of an Assignment executed by the inventors and recorded in the United States Patent and Trademark Office on January 19, 2000 at Reel 10414, Frame 0583, and a merger document recorded in the United States Patent and Trademark Office on October 12, 2000 at Reel 011217, Frame 0591.

In view of valuable consideration, receipt of which is hereby acknowledged, AstraZeneca Canada hereby assigns and transfers unto the National Research Council of Canada (hereinafter "NRC"), an agency of the Government of Canada, located at 1200 Montreal Road, Bldg. M-58, Ottawa, Ontario, K1A 0R6, Canada, its successors and assigns, AstraZeneca Canada's entire right, title and interest in the Inventions, the Application and all related applications (including all divisions, reissues, continuations, and extensions thereof) and all counterparts in other countries; and any and all Letters Patent (and certificates of invention or similar certificates) (hereinafter "Patents") which may be granted based upon the Inventions or the Application or related applications or counterparts in other countries, said transfer and assignment being applicable throughout the world. AstraZeneca Canada authorizes and requests officials of patent offices in any and all countries of the world to issue

any and all of the Patents, when granted, to NRC, its successors and assigns, as the assignee of AstraZeneca Canada's entire right, title, and interest in and to the same.

ASTRAZENECA CANADA INC.

Date 24 Sept 2003

By 
Bo Hasslev
Director IP Finance and IS



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

JANUARY 09, 2001

PTAS

PILLSBURY MADISON & SUTRO
MICHAEL A. SANZO
EAST TOWER-NINTH FLOOR
1100 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005-3918



101513462A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 10/12/2000

REEL/FRAME: 011217/0591 -95
NUMBER OF PAGES: 5

BRIEF: MERGER (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

ASTRA PHARMA INC.

DOC DATE: 12/22/1999

ASSIGNEE:

ASTRAZENECA CANADA INC.
1004 MIDDLEGATE ROAD
MISSISSAUGA, ONTARIO, CANADA

L4Y 1M4

SERIAL NUMBER: 09254227
PATENT NUMBER:

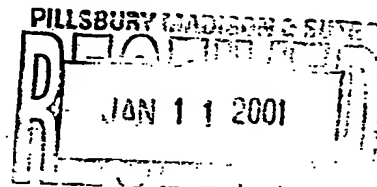
FILING DATE: 03/03/1999
ISSUE DATE:

SERIAL NUMBER: 09341016
PATENT NUMBER:

FILING DATE: 07/01/1999
ISSUE DATE:

SERIAL NUMBER: 09554326
PATENT NUMBER:

FILING DATE: 05/12/2000
ISSUE DATE:



011217/0591 PAGE 2

SERIAL NUMBER: 09029633
PATENT NUMBER:

FILING DATE: 03/05/1998
ISSUE DATE:

SERIAL NUMBER: 09555576
PATENT NUMBER:

FILING DATE:
ISSUE DATE:

SERIAL NUMBER: 09555579
PATENT NUMBER:

FILING DATE:
ISSUE DATE:

SERIAL NUMBER: 09555580
PATENT NUMBER:

FILING DATE:
ISSUE DATE:

SERIAL NUMBER: 09555575
PATENT NUMBER:

FILING DATE: 06/01/2000
ISSUE DATE:

SERIAL NUMBER: 09029468
PATENT NUMBER: 6153626

FILING DATE: 03/03/1998
ISSUE DATE: 11/28/2000

SERIAL NUMBER: 08836830
PATENT NUMBER: 6130222

FILING DATE: 04/24/1997
ISSUE DATE: 10/10/2000

SERIAL NUMBER: 09460722
PATENT NUMBER:

FILING DATE: 12/14/1999
ISSUE DATE:

SERIAL NUMBER: 09460723
PATENT NUMBER:

FILING DATE: 12/14/1999
ISSUE DATE:

SERIAL NUMBER: 08981700
PATENT NUMBER:

FILING DATE: 01/07/1998
ISSUE DATE:

ANTIONE ROYALL, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

MRD

11-13-2000

FORM TOL 1594 (Rev. 5-97)
ORM No. 0651-0011 (exp. 4-94)

U.S. DEPARTMENT OF COMMERCE

Patent and Trademark Office

101513462

To the Honorable Commissioner of Patents and Trademarks, I enclose the original documents or copy thereof.

1. Name of conveying party(ies):

Astra Pharma Inc.

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

2. Name and address of receiving party(ies):

Name: AstraZeneca Canada Inc.

Internal Address:

Street Address: 1004 Middlegate Road

City/State/ZIP: Mississauga, Ontario L4Y 1M4

CANADA

Additional name(s) & address(es)
attached?☐ Yes ☒ No

3. Nature of conveyance:

- ☐ Assignment ☒ Merger
☐ Security Agreement ☐ Change of Name
☐ Other

Execution Date: December 22, 1999

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

B. Patent No.(s)

SEE LIST ATTACHED

Additional numbers attached? ☒ Yes ☐ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Michael A. Sanzo

Internal Address:

Street Address: Pillsbury Madison & Sutro
East Tower - Ninth Floor
1100 New York Avenue, N.W.

City/State/ZIP: Washington, D.C. 20005-3918

6. Total number of applications and patents involved:

13

7. Total Fee (37 C.F.R. § 3.41) \$ 520.00

- ☒ Enclosed
☐ Authorized to be charged to deposit account

8. Deposit account number:

(Attach duplicate copy of this page if paying by deposit account)

8/2000 MTHA11 00000020 09254227

DO NOT USE THIS SPACE

C:581

520.00 OP

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Michael A. Sanzo

Name of Person Signing

Signature

Date

October 12, 2000

Total number of pages including cover sheet, attachments, and document:

6

Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignments
Washington, D.C. 20231

FORM6-03.WP5

**List of Applications on Which the Name of the Assignee Should Be
Changed from Astra Pharma Inc. to AstraZeneca Canada Inc.**

09/254,227

09/341,016

09/554,326

09/029,633

09/555,576

09/555,579

09/555,580

09/555,575

09/029,468

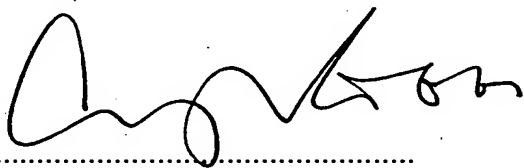
08/836,830

09/460,722

09/460,723

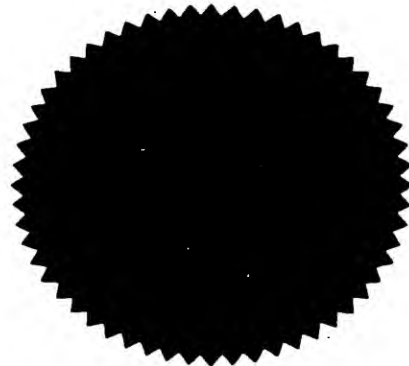
08/981,700

I **ANTHONY JANION GIBBS** of Wilmslow, Cheshire, England, Notary Public duly authorised admitted and sworn and practising within the United Kingdom of Great Britain and Northern Ireland **do hereby certify** that the photostat matter hereto annexed is a true copy of a document the original of which was produced to me at Macclesfield, Cheshire, England, this 22nd day of June in the year two thousand.



Anthony Janion Gibbs

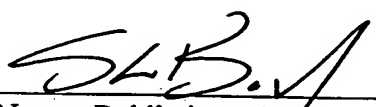
Notary Public

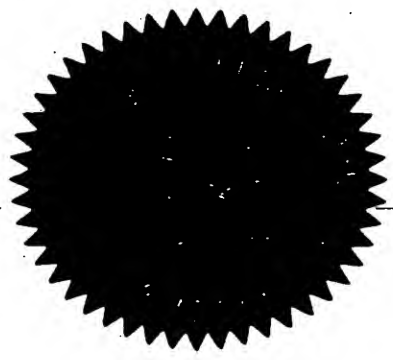


CANADA)
PROVINCE OF ONTARIO)
CITY OF TORONTO)
TO WIT:)


I, STEPHEN DOUGLAS BODLEY, a Notary Public in and for the Province of Ontario, by Royal Authority duly appointed, residing in the City of Toronto in the said Province DO HEREBY CERTIFY that the paper writing hereto annexed, the first page of which is stamped with an impression of my seal, is a true and correct photostatic copy of documents produced and shown to me out of custody of Blake, Cassels & Graydon LLP, Toronto, Ontario and purporting to be the original Certificate and Articles of Amendment of **ASTRAZENECA CANADA INC.** issued by the Ministry of Consumer and Commercial Relations and dated December 31, 1999, the said photostatic copy having been compared by me, page for page, with the said original documents, an act whereof being requested I have granted the same under my hand and notarial seal of office to serve and avail as occasion shall or may require.

DATED at Toronto this 13th day of March, 2000.


A Notary Public in and for
the Province of Ontario





 Ministry of
Consumer and
Commercial Relations

CERTIFICATE

This is to certify that these articles are effective on

DECEMBER 31 DÉCEMBRE, 1999

Ministère de
la Consommation
et du Commerce

CERTIFICAT

Ceci certifie que les présents
statuts entrent en vigueur le

Ant D. 1627

Director / Directeur
Business Corporations Act / Loi sur les sociétés par actions

ARTICLES OF AMENDMENT STATUTS DE MODIFICATION

**Form 3
Business
Corporations
Act**

Formule 3 loi sur les sociétés par actions

- 1. The name of the corporation is:**

Dénomination sociale de la société:

[illegible]

2. The name of the corporation is changed to (if applicable):

Nouvelle dénomination sociale de la société (s'il y a lieu):

[illegible]

- 3. Date of incorporation/amalgamation:**

Date de la constitution ou de la fusion:

1954 JUNE 28

(Year, Month, Day)
(année, mois, jour)

4. The articles of the corporation are amended as follows:

Les statuts de la société sont modifiés de la façon suivante.

To change the name of the Corporation to:

ASTRAZENECA CANADA INC.

5. The amendment has been duly authorized as required by Sections 168 & 170 (as applicable) of the Business Corporations Act.

La modification a été dûment autorisée conformément aux articles 168 et 170 (selon le cas) de la Loi sur les sociétés par actions.

6. The resolution authorizing the amendment was approved by the shareholders/directors (as applicable) of the corporation on

Les actionnaires ou les administrateurs (selon le cas) de la société ont approuvé la résolution autorisant la modification le

1999 DECEMBER 22

(Year, Month, Day)
(année, mois, jour)

These articles are signed in duplicate.

Les présents status sont signés en double exemplaire.

ASTRA PHARMA INC.

(Name of Corporation)
(Dénomination sociale de la société)

By:/Par.

(Signature)
(Signature)

(Description of Office)
(Fonction)



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

MARCH 01, 2000

PTAS

VINSON & ELKINS LLP
MICHAEL A. SANZO
2300 FIRST CITY TOWER
1001 FANNIN
HOUSTON, TX 77002-6760



101257417A

RECEIVED

MAR 13 2000

Docket Sec.
Vinson & Elkins

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 01/19/2000

REEL/FRAME: 010414/0583
NUMBER OF PAGES: 4

BRIEF: CORRECTIVE ASSIGNMENT TO CORRECT THE NAME OF THE ASSIGNOR, FILED ON 4-9-99, RECORDED ON REEL/FRAME 9877/0531 ASSIGNOR HEREBY CONFIRMS THE ASSIGNMENT OF THE ENTIRE INTEREST.

ASSIGNOR:
SHI-HSIANG, SHEN

DOC DATE: 03/23/1999

ASSIGNOR:
AHMAD, SULTAN

DOC DATE: 03/16/1999

ASSIGNOR:
FORTIN, YVES

DOC DATE: 03/16/1999

ASSIGNOR:
BANVILLE, DENIS

DOC DATE: 03/16/1999

ASSIGNOR:
O'DONNELL, DAJAN

DOC DATE: 03/16/1999

ASSIGNOR:
LEMBO, PAOLA

DOC DATE: 03/16/1999

010414/0583 PAGE 2

ASSIGNEE:

ASTRA PHARMA INC.
1004 MIDDLEGATE ROAD
MISSISSAUGA, ONTARIO L4Y 1M4,
CANADA

SERIAL NUMBER: 09254227
PATENT NUMBER:

FILING DATE: 03/03/1999
ISSUE DATE:

ANTIONE ROYALL, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

03-01-2000



101257417

FORM PTO-1594 (Rev. 6-93)

U.S. DEPARTMENT OF COMMERCE

OBM No. 0651-0011 (exp. 4/94)

Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Shen Shi-Hsiang, Sultan Ahmad, Yves Fortin, Denis Banville,
Dajan O'donnell and Paola LemboAdditional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

1-19-2000

3. Nature of conveyance:

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other _____

Execution Date: March 16 and 23, 1999

2. Name and address of receiving party(ies):

Name: Astra Pharma Inc.

Internal Address: _____

Street Address: 1004 Middlegate RoadMississauga, Ontario L4Y 1M4City/State/ZIP: CanadaAdditional name(s) & address(es)
attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: _____

A. Patent Application No.(s)

09/254,227

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Michael A. Sanzo

Internal Address: _____

Street Address: Vinson & Elkins L.L.P.
2300 First City Tower
1001 FanninCity/State/ZIP: Houston, TX 77002-6760

6. Total number of applications and patents involved:

1

7. Total Fee (37 C.F.R. § 3.41) \$ _____

☐ Enclosed☒ Authorized to be charged to deposit account

8. Deposit account number:

22-0365

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Michael A. Sanzo
Name of Person SigningMichael A. Sanzo
SignatureJanuary 18, 2000
Date

Total number of pages including cover sheet, attachments, and document:

4

Mail documents to be recorded with required cover sheet information to :
Commissioner of Patents & Trademarks, Box Assignments
Washington, D.C. 20231

FORM6-03.WP5

Change 40.00
NO SREC
Fee

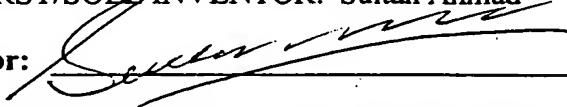
ASSIGNMENT TO ASTRA PHARMA Inc

Title: NOVEL G PROTEIN-COUPLED RECEPTOR
Inventors: Sultan Ahmad, Denis Banville, Yves Fortin, Paola
Lembo, Dajan O'Donnell and Shi-Hsiang Shen
U.S. Appl. No:
U.S. Filing Date:
Execution Date of Application:

As a below-named inventor, I hereby declare that:

My post office address is as stated below under my signature and I am named as inventor of the inventions or discoveries (herein INVENTIONS) as described in the patent application (herein APPLICATION) identified above. In view of valuable consideration, receipt thereof is hereby acknowledged, I do hereby assign and transfer unto ASTRA Pharma Inc., a corporation of Canada having a place of business at 1004 Middlegate Road, Mississauga, Ontario L4Y 1M4, Canada, its successors and assigns, my entire interest in and the full and exclusive right to the INVENTIONS, the APPLICATION and all related applications (including all divisions, reissues, continuations, and extensions thereof) and all counterparts in other countries, and any and all Letters Patent (and certificates of invention or similar certificates) (herein PATENTS) which may be granted based upon the INVENTIONS or the APPLICATION or related applications or counterparts in other countries; said transfer and assignment being applicable throughout the world. I hereby authorize and request officials of patent offices in any and all countries of the world to issue any and all of the PATENTS, when granted, to ASTRA Pharma Inc., its successors and assigns, as the assignee of my entire right, title, and interest in and to the same. I agree that I will communicate to ASTRA Pharma Inc., or its representatives, any facts known to me respecting the invention; testify in any legal proceedings; sign all lawful papers; execute all divisional, continuation, substitution, renewal, and reissue applications; execute all necessary assignment papers to cause any and all of the PATENTS to be issued to ASTRA Pharma Inc.; make all rightful oaths; and generally do everything possible to aid ASTRA Pharma Inc., its successors and assigns, to obtain and enforce proper protection for the INVENTION in any and all countries throughout the world.

FULL NAME OF FIRST/SOLE INVENTOR: Sultan Ahmad

Signature of Inventor: 

Address: Astra Research Centre Montreal, 7171 Fredrick-Banting, St Laurent, Quebec H4S 1Z9, Canada

Date: Mar 16/99

FULL NAME OF SECOND/JOINT INVENTOR: Denis Banville

Signature of Inventor: 

Address: 595 Lajeunesse, Ste-Dorothee, Quebec H7X 3K4, Canada

Date: 16/3/99

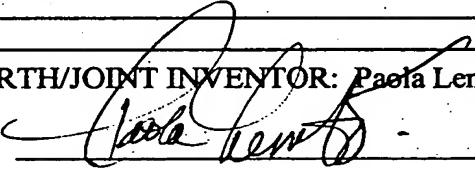
FULL NAME OF THIRD/JOINT INVENTOR: Yves Fortin

Signature of Inventor: 

Address: 2985 Avenue Douglas, Montreal, Quebec H3R 2E2, Canada

Date: 16 mars 1999

FULL NAME OF FOURTH/JOINT INVENTOR: Paola Lembo

Signature of Inventor: 

Address: Astra Research Centre Montreal, 7171 Fredrick-Banting, St Laurent, Quebec H4S 1Z9, Canada

Date: March 16, 99

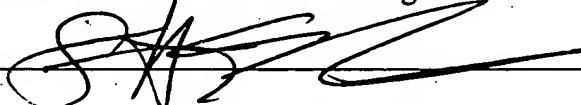
FULL NAME OF FIFTH/JOINT INVENTOR: Dajan O'Donnell

Signature of Inventor: Dajan O'Donnell

Address: Astra Research Centre Montreal, 7171 Fredrick-Banting, St Laurent, Quebec H4S 1Z9, Canada

Date: March 16th 1999.

FULL NAME OF SIXTH/JOINT INVENTOR: Shi-Hsiang Shen

Signature of Inventor: 

Address: 161 Charwell Crescent, Beaconsfield, Quebec H9W 1C2, Canada

Date: March 23, 1999